



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,509	12/08/2003	Thomas A. Green	1715291	2323
24240 7590 05/13/2008 CHAPMAN AND CUTLER 111 WEST MONROE STREET CHICAGO, IL 60603				
EXAMINER NGUYEN, TRAN N				
ART UNIT 3626		PAPER NUMBER		
MAIL DATE 05/13/2008		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/730,509

Applicant(s)

GREEN ET AL.

Examiner

Tran Nguyen

Art Unit

3626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Notice to Applicant

This communication is in response to the communication filed 12/08/2003.

Pending claim(s): 1-31.

Claim Objections

Claim 7 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

As per claim 7, this claim recites "'no inputs are specified or quoted"; however, parent claim 1 previously recited "gathering management data in connection with inputs".

Examiner submits that the alternative embodiment of claim 7 involving "no inputs are specified" fails to further limit parent claim 1 because an input was previously specified in step (a).

For purposes of applying prior art, Examiner interprets claim 7 to recite "no inputs are quoted".

Additional clarification is requested.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim(s) 13-25 is/are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 13, the grammar of this claim renders the scope of the claim indefinite. In particular, Examiner cannot ascertain what the individual elements are.

For purposes of applying prior art, Examiner interprets claim 13 to recite "at least one of: recommending timing of destocking livestock, and performing destocking of livestock.

As per claim 14, "a combination of at least one of" is indefinite because it is not clear how one element could be "a combination".

For purposes of applying prior art, Examiner interprets this limitation to recite "one or more of".

As per claim 15, the grammar of this claim renders the scope of the claim indefinite. In particular, Examiner cannot ascertain what the individual elements are.

For purposes of applying prior art, Examiner interprets this claim to recite "one of:

(a) a sales commission, or

(b) a fee for service to a third party vendor who will deliver and/or apply the quoted products and services".

Similarly, claims 16-25 are replete with optional limitations intermingled with required limitations. Examiner cannot determine which elements Applicant intends to be optional, and which elements Applicant intends to be required limitations.

Claim 25 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim.

As per claim 25, "or others" renders the claim indefinite because it is not clear what "others" is.

For purposes of applying prior art, Examiner interprets claim 25 to recite outputting to any entity.

Additional clarification is requested.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim(s) 1-10, 13-15, 20, 22, 25, 27, 30-31 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Buman (6338040) in view of Hargrove (5897619).

As per claim 1, Buman teaches a method (Abstract) capable of determining compliance (reads on "managing information concerning implementation") with a plurality of best management practices (column 6 line 56, Figure 2 label 18, 20, 22) when growing crop (reads on "agricultural production") (Figure 2 label 14, 16), comprising:

(a) studying (reads on "gathering management data") the effects of pesticide (reads on "inputs") (column 2 line 1-6) and refugia (reads on "services") (column 1 line 17-48) on crop (reads on "food, feed, or fiber") (column 1 line 19);

(b-c) researching (reads on "transmitting" and "analyzing") the effects of pesticide and refugia for a plurality of acre sizes and placements (reads on "a variety of circumstances, places, and conditions") (Figure 1A-B).

Buman does not teach:

(b) "at least one database, each database including information on the performance of those inputs and services";

(c) "storing the gathered information";

Hargrove teaches a plurality of databases (Figure 1-2) capable of verifying insurability based in practice and type for a given crop (Figure 3).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to include the teachings of Hargrove within the embodiment of Buman with the motivation of meeting underwriting requirements (Hargrove; column 7 line 7-9).

Buman further teaches:

(d) writing an insurance policy or warranty for the BPM (Figure 2 label 10);

(e) offering the insurance policy or warranty for sale (reads on "a commercial service agreement") (Figure 2 label 12);

(f) filing a claim (reads on "providing information related to the inputs and services") (Figure 2 label 16), and inspecting (also reads on "providing information related to the inputs and services") the refuge for compliance with BPM (Figure 2 label 18);

(g) surveying (reads on "monitoring") for damage (reads on "status, progress, yield, and other performance measures") (Figure 2 label 22);

(h) paying the claim (reads on "providing a remedy in the event of performance failure") (Figure 2 label 26).

Buman does not teach:

(i) "updating the database with the performance data obtained".

Hargrove teaches entering performance data for a claim (Figure 11).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to include the teachings of Hargrove within the embodiment of Buman and Hargrove with the motivation of validating a claim (Hargrove; Figure 11).

As per claim 2, Buman teaches insecticides (Abstract).

Insofar as the remainder of the claim is concerned, the applied art need not teach these limitations in view of the optional limitations recited therein.

As per claim 3, Buman teaches nitrogen (reads on "soil amendments") (column 2 line 9-11).

As per claim 4, Buman teaches commercial nitrogen (reads on "commercial fertilizer") (column 2 line 9-11).

Insofar as the remainder of the claim is concerned, the applied art need not teach these limitations in view of the optional limitations recited therein.

As per claim 5, Buman teaches:

(a) seeds (Abstract);

(b) seeds (reads on "plant species") (Abstract).

Insofar as the remainder of the claim is concerned, the applied art need not teach these limitations in view of the optional limitations recited therein.

As per claim 6, Buman teaches:

- (a) nitrogen (reads on "control chemicals") (column 2 line 9-11);
- (b) nitrogen (reads on "soil amendments") (column 2 line 9-11);
- (c) nitrogen (reads on "nutrients") (column 2 line 9-11);
- (d) seeds (Abstract);
- (e) seeds (reads on "plant species") (Abstract).

Insofar as the remainder of the claim is concerned, the applied art need not teach these limitations in view of the optional limitations recited therein.

As per claim 7, Buman teaches offering a technology package (reads on "no inputs quoted") with a warranty (reads on "performance guarantee") or an insurance policy (Figure 2 label 12).

As per claim 8, Buman teaches a technology-fee for seeds (reads on "application of inputs") (column 3 line 44-48).

As per claim 9, Buman teaches:

- (a) placing acres correctly (reads on "production conditions") (Figure 1A-B);
- (b) controlling pest populations (column 1 line 17-48);

Art Unit: 3626

(c) optimal nitrogen level (reads on "nutrient levels") (column 2 line 11-18).

Insofar as the remainder of the claim is concerned, the applied art need not teach these limitations in view of the optional limitations recited therein.

As per claim 10, Buman teaches reducing nitrogen levels (reads on "types" and "amounts") (column 2 line 7-38).

Insofar as the remainder of the claim is concerned, the applied art need not teach these limitations in view of the optional limitations recited therein.

As per claim 13, Buman teaches application to livestock (column 7 line 49). Because Buman teaches using a known technique of pairing genetically modified crops next to hybrid crops (Figure 1A) to prevent the spread of genetically resistance pests, similar rationale applies to livestock, wherein the placement of livestock could have a bearing on the spreading of disease and other pests.

Therefore, at the time the invention was made, it would have been obvious to one of ordinary skill in the art to improve the embodiment of Buman and Hargrove by manipulating the placement of livestock to achieve the predictable result of avoid spreading disease and pests.

As per the set of claim(s): 14, 15, this set of claim is rejected for substantially the same rationale as applied to the rejection of the set of claim(s): 8, 8, respectively, and incorporated herein.

Insofar as the remainder of the claim is concerned, the applied art need not teach these limitations in view of the optional limitations recited therein.

As per claim 20, Buman teaches identifying correct and incorrect field layouts (Figure 1A-B).

As per claim 22, Buman teaches paying the claim for failure of seed of technology (Figure 2).

As per claim 25, Buman teaches using crop data to estimate a loss and determine the payout (column 5 line 66 to column 6 line 9).

As per claim 27, Buman does not teach "a computer network, handheld computer, portable computer and/or wireless device".

Hargrove teaches a plurality of PCs (reads on "portable computer") connected into a network (column 4 line 17-25).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to include the teachings of Hargrove within the embodiment of Buman and Hargrove with the motivation of leveraging technology.

As per claim 30, Buman does not teach "the user of the information system".

Hargrove teaches providing the system for use by farmers (column 1 line 13-16).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to include the teachings of Hargrove within the embodiment of Buman and Hargrove with the motivation of providing convenience (Hargrove; column 2 line 10-16) and assisting farmers in accurately identifying land (Hargrove; column 2 line 17-30).

As per claim 31, Buman teaches providing a warranty (Figure 2), wherein the warranty is provided by the seller of a product or service (column 2 line 65 to column 3 line 1).

Claim(s) 11, 16-19, 21 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Buman in view of Hargrove as applied to parent claim 1 above, and further in view of Applicant Admitted Prior Art (AAPA).

As per claim 11, Buman teaches using insurance and warranty plans to promote good farming practices (column 1-2 and throughout).

Buman and Hargrove do not teach "tillage practices".

AAPA teaches that reduced plowing is a known technique to preserve organic materials, thereby improving long-term yield (page 5 paragraph 2).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to include the teachings of AAPA within the embodiment of Buman and Hargrove with the motivation of promoting good farming practices.

As per claim 16, Examiner notes that federal crop insurance is considered to be AAPA because Applicant is not the federal government, and at the time the invention was made, Applicant admits that federal crop insurance was known (page 2 paragraph 4). Additional clarification is requested if Applicant asserts that Applicant invented federal crop insurance.

Since federal crop insurance is known in the art, at the time the invention was made, it would have been obvious to one of ordinary skill in the art to consider federal crop insurance coverage when implementing the embodiment of Buman and Hargrove with the motivation of avoiding moral hazards by over-insuring the farmer, thereby providing the farmer with motivation to file a claim.

Specifically, Official Notice is taken that insurance is known to compensate the insured for specific insurable events, and typically does not insure for more than the value of a loss. Otherwise, the insureds will be motivated to cause an insurable event on purpose with the motivation of profit.

As per claim 17, AAPA teaches that it is known in the art to provide tax credits to encourage the use of BMP (page 3 paragraph 3).

Therefore, this claim is rejected for similar rationale as applied to claim 16 above, and incorporated herein. Similarly, additional clarification is requested if Applicant asserts that Applicant invented providing tax credits to encourage BMP.

As per claims 18-19, these claims are rejected for similar rationale as applied to claims 16-17 above, and incorporated herein.

In particular, Applicant recites "emissions trading credits" and "compliance requirements"; however, Applicant does not recite how these elements are used to provide an insurance quote or to issue a policy. Therefore, the only difference between the prior art known at the time the invention was made and the claimed invention is in the elements noted above, such recitation amounts to nonfunctional descriptive material because the only difference is in the description of the recited element. No other positive recitation is directed towards how these elements are used to distinguish over the prior art.

As per the set of claim(s): 21, this set of claim is rejected for substantially the same rationale as applied to the rejection of the set of claim(s): 16, respectively, and incorporated herein.

Claim(s) 12, 26, 28 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Buman in view of Hargrove as applied to parent claim 1 above, and further in view of Official Notice.

As per claim 12, Buman teaches using insurance and warranty plans to promote good farming practices (column 1-2 and throughout).

Buman and Hargrove do not teach "controlled burning of vegetation".

Official Notice is taken that burning trees and other plants is a known farming technique.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to include the teachings of the Official Notice within the embodiment of Buman and Hargrove with the motivation of preventing forest fires.

As per claims 26, 28, Hargrove teaches validating claimed damage due to weather (Figure 11). Hargrove further teaches accessing a weather database to verify weather data (column 14 line 47-49).

Buman and Hargrove do not teach using "satellite, aerial, infrared, digital, or other photography or imaging" or "GPS" to obtain data.

Official Notice is taken that using satellite and GPS to measure weather conditions is old and well established in the art of weather monitoring.

All component parts are known. The only difference is the combination of "old elements" into a single embodiment.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to include the teachings of Hargrove and the Official Notice within the embodiment of Buman and Hargrove, since the operation of the weather sensor is in no way dependent on the insurance validation system, and a standard weather data sensor may be used with an insurance validation system to achieve the predictable result of verifying weather data for claims.

Claim(s) 23-24 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Buman in view of Hargrove as applied to parent claim 1 above, and further in view of Walker (6119093).

As per claims 23-24, Buman and Hargrove do not teach reinsurance.

Walker teaches selling shares to underwrite an insurance policy (Abstract).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to include the teachings of the Walker within the embodiment of Buman and Hargrove with the motivation of syndicating insurance by preventing a single insurance carrier from being overexposed (Walker; column 1 line 42-23).

Claim(s) 29 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Buman in view of Hargrove as applied to parent claim 1 above, and further in view of Little (Collusion in the U.S. crop insurance program: applied data mining).

As per claim 29, Buman and Hargrove do not teach providing data to regulators for a fee.

Little teaches that the USDA is attempting to track down fraud by mining insurance data (page 594 column 2 paragraph 1 and throughout).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to offer the database of Buman and Hargrove to the government with the motivation of obtaining financial benefits or legal compliance.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Turvey (The Role of Ex Ante Regulations in Addressing Problems of Moral Hazard in Agricultural Insurance) teaches BMP insurance.

Mitchell (Rating Methodology for Nutrient Management/Best Management Practice Insurance) teaches BMP insurance.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tran (Ken) N. Nguyen whose telephone number is 571-270-1310. The examiner can normally be reached on Monday - Friday, 9:00 am - 5:00 pm Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, C. Luke Gilligan can be reached on 571-272-6770. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3626

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. N./

Examiner, Art Unit 3626

05/08/2008

/Robert Morgan/

Primary Examiner, Art Unit 3626